

**UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MASSACHUSETTS**

SINGULAR COMPUTING LLC,

Plaintiff,

v.

GOOGLE LLC,

Defendant.

Civil Action No. 1:19-cv-12551 FDS

Hon. F. Dennis Saylor IV

**DEFENDANT GOOGLE LLC'S OPPOSITION TO
PLAINTIFF'S MOTION TO COMPEL 30(B)(6) TESTIMONY**

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I. INTRODUCTION

Plaintiff Singular Computing LLC (“Singular”) has moved to compel Rule 30(b)(6) testimony on 16 detailed damages-related topics that purport to cover more than a dozen *unaccused* Google products and services and every Google data center worldwide, whether or not it deploys the accused Tensor Processing Units (TPUs)¹ at issue in this case. This motion marks the second time in the last month that Singular has moved to compel without first engaging in a good faith meet-and-confer with Defendant Google LLC (“Google”). Singular’s failure to do so here violates Federal and Local Rules that are designed to avoid unnecessarily burdening the Court with disputes which, like this one, have not yet been narrowed by the parties. For this reason alone, Singular’s motion should be denied.

That Singular moved improperly and prematurely is apparent in its brief, which contains reformulated deposition topics that Singular never shared with Google, as well as numerous misstatements regarding Google’s positions and nature of the parties’ disagreements. Indeed, Google has already agreed to produce a witness to testify on 26 of Singular’s topics, including Google’s development of the accused TPUs, the deployment and use of the accused TPUs in Google’s data centers, related planning and development costs, profits and losses related to Google’s Cloud TPU products, and comparisons between TPUs and other machine learning alternatives.² Google expects that this testimony will address all of the issues relevant to Singular’s damages claims. But, consistent with its past practice, Singular ignored Google’s request to meet and confer over the scope of any additional testimony and instead rushed to court

¹ TPUs are application specific integrated circuits designed specifically by Google for neural network machine learning.

² See Declaration of Andrew Bruns (“Bruns Decl.”), Ex. D (summarizing the testimony Google has already agreed to provide) at Topics 1-9, 11, 19, 27, 29, 31, 33-34, 42, 44-45.

seeking an order compelling Google’s testimony on 16 damages-related topics that are unreasonable in scope and disproportionate to the needs of the case, and which constitute nothing more than a fishing expedition into Google’s finances.

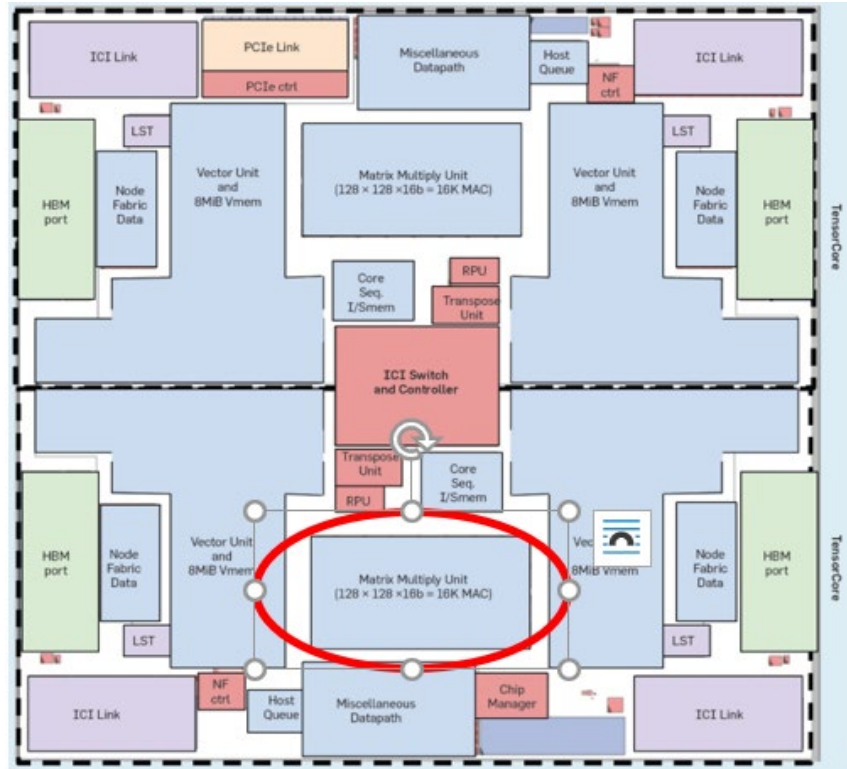
The topics on which Singular moves include the following:

1. Projected and actual costs, including R&D costs, capital expenses, operating expenses, and investment plans relating to the Accused TPUs, ***which Google has already agreed to provide***;
2. Detailed projected and actual financial data and analyses for at least 16 of Google’s flagship services, ***none of which are accused here***. These include Ads, Search, YouTube, Google News, the Google Play Store, Google Photos, Image Search, Google Lens, Google Docs, Gmail, Google Translate, Speech, and others (the “Services”);
3. Sweeping financial discovery into any “product group or business segment(s)” connected or formerly connected to the Services, which implicates nearly all aspects of Google’s business, regardless of how tenuous a connection to Singular’s theory of infringement or any reasonable royalty damages; and
4. The costs, expenses, budgets, forecasts, projections, and analyses for ***all of Google data centers worldwide***.³ Indeed, one of these topics (Topic 36) is not even limited to ***Google’s*** data centers. (“The average cost, as of 2017, to build a data center.”).

These topics are wildly overbroad and seek invasive discovery from Google that is untethered to Singular’s allegations and disproportionate to the needs of the case. Though Singular has never articulated a cogent theory of infringement, its infringement contentions make clear that the only Accused Products are “TPUv2 and TPUv3” (which Google has already agreed to provide ample testimony on), and that within those devices, Singular accuses only the “matrix multiply unit” (or “MXU”), a tiny part of the chip that sits on the TPU board, of infringement. The diagram below,

³ In fact, none of Singular’s topics are limited in scope to the United States, even though Singular cites no authority (nor is Google aware of any) entitling it to extraterritorial patent damages. To the contrary, the Patent Act expressly provides for recovery for infringing acts occurring “within the United States” or in connection with importation “into the United States.” 35 U.S.C. § 271(a). Similarly, all but two of the topics raised in Singular’s motion are boundless as to time.

which Singular cites repeatedly in its infringement contentions, is illustrative:



Bruns Decl., Ex. A. at 5.

As reflected above, Singular’s infringement allegations target a *subpart of a subpart* of the Accused TPUs, and any reasonable royalty to which Singular could possibly be entitled “must be based on the incremental value that the patented invention”—here, the MXU—“adds to the end product.” *Ericsson, Inc. v. D-Link Sys., Inc.*, 773 F.3d 1201, 1226 (Fed. Cir. 2014). Singular’s allegations, targeting subparts of the TPU chips, do not entitle it to detailed financial discovery into all of the Google Services that may use TPU technology or all of the financial data related to every Google data center located anywhere in the world. Singular must, at the very least, articulate a cognizable damages theory connecting the MXU and the alleged infringement to the sensitive, burdensome financial discovery it now seeks. It has yet to offer any such theory. To the contrary, Singular’s motion concedes that any connection is purely

speculative.

For these reasons and those discussed below, Singular's motion should be denied.

II. BACKGROUND

Singular served its operative Rule 30(b)(6) notice to Google on May 5, 2021, following the April 30, 2021 hearing in which the Court ordered Singular to serve a pared down and complete notice.⁴ *See* ECF No. 183-6. Google subsequently served formal responses and objections on May 12, 2021, and the parties met and conferred on May 14, 2021. During that call, the parties appeared to resolve several disputes and agreed to continue conferring as to the few remaining areas of disagreement. Specifically, Singular agreed to serve a revised Rule 30(b)(6) notice reflecting the parties' progress. For its part, Google agreed to amend its responses upon receipt of Singular's amended Rule 30(b)(6) notice. *See* ECF No. 219-2 ("During what we believed to be a productive conversation, Singular agreed to modify certain topics in its most recent Rule 30(b)(6) notice and Google agreed to amend its responses accordingly.").

But Singular apparently had a change of heart.⁵ Nearly three weeks after the parties' May 14 call, Singular emailed Google a lengthy list of complaints that were never raised in the parties' prior correspondence or during the call. ECF No. 219-2. Further, many of Singular's complaints undid the progress the parties had seemingly made in their meet-and-confer call. Google responded later that day, requesting that Singular identify times to meet and confer regarding Singular's newfound concerns. ECF No. 219-2. Singular refused, threatening to file the instant motion to compel if Google did not agree to immediately waive all objections to 22

⁴ Because the Court is familiar with the background of the prior dispute, *see* ECF No. 153, *et seq.*, Google does not restate it here.

⁵ Singular's Motion to Compel includes a list of revised deposition topics. Mot. at 3-4. Google saw this list for the first time in Singular's motion.

noticed topics.⁶ Google replied the next business day, June 7, reiterating that the issues that Singular now raises were new and therefore not ripe for motion practice and again asking to meet and confer. *Id.* Singular never responded and instead filed this motion.

III. LEGAL STANDARD

Singular seeks broad financial discovery related to its reasonable royalty damages claim. Reasonable royalty analyses commonly use the “hypothetical negotiation” construct described in *Georgia-Pacific*, which assumes a hypothetical arm’s length negotiation of a license to practice the patents-at-issue between a willing patentee and a willing licensee at the point of the first alleged infringement. *See Georgia-Pacific Corp. v. U.S. Plywood Corp.*, 318 F. Supp. 1116, 1120-21 (S.D.N.Y. 1970), *modified and aff’d*, 446 F.2d 295 (2d Cir. 1971).

Calculation of a reasonable royalty requires determination of (1) the royalty base—*i.e.*, the revenue pool implicated by the infringement; and (2) the royalty rate—*i.e.*, the percentage of that pool adequate to compensate the patentee for the infringement. Cost savings realized by the accused infringer as a result of adopting the accused technology can also form the basis of a reasonable royalty calculation. However, any reasonable royalty “must be based on the incremental value that the patent invention adds to the end product.” *Ericsson*, 773 F.3d at 1226; *see also Prism Techs., LLC v. Sprint Spectrum L.P.*, 849 F.3d 1360, 1376 (Fed. Cir. 2017) (noting the requirement that a patentee “carefully tie proof of damages to the claim invention’s footprint in the market place” applies equally where the patentee seeks to establish a reasonable royalty based on cost savings to the alleged infringer).

Although the Federal Rules of Civil Procedure contemplate broad discovery, the right to

⁶ Singular’s Motion seeks to compel testimony related to 16 topics. But Singular has refused to confirm that any topics not listed in its motion are ones on which the parties agree.

discovery is not unlimited. *See Hickman v. Taylor*, 329 U.S. 495, 507 (1947). Discovery regarding irrelevant matters or in pursuit of speculative inquiries is improper. *See Fed. R. Civ. P. 26(b)(1)*; *Micro Motion, Inc. v. Kane Steel Co., Inc.*, 894 F.2d 1318, 1326 (Fed. Cir. 1990). Once a relevance objection is raised, the burden to demonstrate the information's relevance shifts to the party seeking it. *See Andritz–Sprout–Bauer Inc. v. Beazer East, Inc.*, 174 F.R.D. 609, 631 (M.D. Pa. 1997) (internal citations omitted). The party seeking discovery must be able to “articulate the possible linkage between the discovery sought and admissible evidence.” 7 Moore’s Federal Practice § 37.22[2][B]. Even where the discovery sought is relevant, the party seeking it must show how the discovery is proportional to the needs of the case. *See, e.g., Novanta Corp. v. Iridion Laser, Inc.*, 15-1033-SLR-SRF, 2016 WL 4987110, at *4 (D. Del. Sep. 16, 2016) (denying patentee broad discovery into accused infringer’s corporate records because it “is not narrowly tailored or proportional to [plaintiff’s] infringement claims.”). Finally, both the Federal Rules of Civil Procedure and this District’s Local Rules require a party to meet and confer before filing a motion to compel. *See Fed. R. P. 37(a)(1)*; Local Rule 7.1(A)(2).

IV. ARGUMENT

A. **Singular has repeatedly violated the Federal Rules’ and this Court’s requirements that litigants meet and confer in good faith before initiating motion practice.**

Both the Federal Rules of Civil Procedure and this District’s Local Rules require a party to meet and confer before filing a motion to compel. *See Fed. R. Civ. P. 37(a)(1)*; Local Rule 7.1(a)(2). Rule 30(b)(6) separately requires the parties to meet and confer regarding the topics for corporate examination. Singular failed to satisfy any of these requirements. After a seemingly productive preliminary conversation regarding Singular’s notice on May 14, 2021, Singular failed to serve an amended notice as it had promised. It ignored Google’s communications for over two weeks, *see* Bruns Decl., Ex. B (May 24, 2021 Bruns email to Ercolini), and eventually

responded by demanding that Google immediately waive all objections to a laundry list of new issues, undoing several areas of compromise that the parties had reached during their May 14 call, ECF No. 291-2. Singular subsequently refused two different requests from Google to meet and confer prior to filing this motion. *See* ECF No. 219-1.

Any suggestion that the parties reached an impasse *before* Singular moved to compel is false, a fact which is apparent from Singular's motion itself. Most telling, Singular's motion lists revised Rule 30(b)(6) topics that Singular acknowledges it never before shared with Google and which contradict the positions Singular took on the parties' May 14, 2021 call. Mot. at 3 n.2. And Singular's Local Rule 7.1(a)(2) certification, attached to its motion, misstates Google's actual positions. In it, Singular claimed the following:

counsel for Google indicated that it intended to produce a corporate witness to testify on damages topics with respect to the Accused Products only, and that it would not produce a corporate representative to testify on damages topics as to any other Google product or service (or with respect to its data centers) that includes and/or uses the Accused Products. This position was consistent with Google's objections and responses to Singular's May 12, 2021⁷ notice of 30(b)(6) deposition.

Mot. at 11. None of these assertions is accurate.

First, Google has never suggested that it will produce a corporate witness to testify on "damages topics with respect to the Accused Products only." To the contrary, Google has explicitly agreed to produce a witness to testify about damages issues related to its Cloud TPU services, which allow persons outside Google to access the TPUs' computing capabilities through a cloud-based service, and which are not accused by Singular here. *See, e.g.*, ECF 215-3 at 9 (Resp. to Topic 10) ("Google will designate one or more witnesses to testify regarding costs and expenses related to the use of the accused TPU v2 and TPU v3 and the profits and losses

⁷ Singular's notice was dated and served on May 5, 2021, not May 12. *See* ECF 183-6.

related to Google’s Cloud TPU products/services within the United States.”). Google also already agreed to produce a witness to testify about comparisons between accused TPUs and other machine learning technology not at issue in this case. *See id.* at 24 (Resp. to Topic 33) (“Google will produce one or more witnesses to testify about comparisons between the accused TPU v2 and TPU v3 and alternatives for machine-learning training.”). Thus, Singular’s misstatement about the scope of discovery Google is willing to provide—and indeed has already agreed to provide—is flatly contradicted by the written record. *See also* n.2, *supra*.

Second, during the parties’ May 14, 2021 call, Google made clear that it will produce a witness to discuss the deployment and use of the accused TPUs in its data centers, including related costs, plans, and asset requests. Singular’s attorney certification misstates Google’s positions and misleads the Court about what is actually in dispute here. It also misrepresents that the parties met and conferred over “the issues raised by [Singular’s] motion.” Mot. at 11. They haven’t. Singular only raised many of those issues for the first time by email on June 7, 2021, refused to discuss them with Google by phone, and filed its motion days later. As a result, Singular’s motion addresses revised Rule 30(b)(6) topics that not only have the parties never discussed, but that Google had never even seen. Singular’s motion should be denied for this reason alone. Its refusal to meet and confer flouts the requirements of the Federal and Local Rules, and has compounded the unnecessary confusion and expense invited by Singular’s misstatements about Google’s positions. Against this backdrop, Singular has all but ensured the Court and the parties will waste time and money on issues that are not ripe for resolution or were unnecessary to raise in the first place. Courts in this District have correctly denied premature motions to compel for similar reasons. *See, e.g., Hasbro, Inc. v. Serafino*, 168 F.R.D. 99, 101 (D. Mass. 1996) (denying motion to compel as premature because the parties “had not yet reached an

impasse in the discussions before the motion was filed” and because the moving party had failed to satisfy the procedural requirements for filing the motion); *see also Stornaiuolo v. New Hampshire Boat Builders*, 113 F.R.D. 655, 658 (D. Mass. 1987) (refusing to consider opposition to motion to compel because the opposing party had failed to comply with the Local Rules’ meet and confer requirement).⁸ The Court should likewise deny Singular’s motion here.

B. Google already agreed to designate numerous corporate witnesses who will address all of the issues raised in Singular’s Rule 30(b)(6) topics.

Singular’s failure to comply with its meet and confer obligations is not just a formalistic concern. By refusing to meet and confer, Singular failed to understand Google’s positions on Singular’s Rule 30(b)(6) topics and foreclosed any opportunity for the parties to narrow their disputes. As noted above, there appears to be an opportunity to find common ground—a fact obscured by Singular’s repeated misstatements of Google’s positions. For example, Singular accuses Google of refusing to “produce a witness to testify about anything other than the matrix multiplier unit of the accused Tensor Processing Unit Boards (‘TPU boards’) versions 2 and 3 (‘v2’ & ‘v3’).” Mot. at 2. It also claims that Google has “refused to produce a witness to testify [on] the value that the Accused Products . . . have added to myriad Google products and services.” *Id.* at 4-5. And it contends that Google refuses to produce a witness regarding “the costs savings that the TPU v2 and v3 boards . . . have enabled Google to realize in . . . its data center[s].” *Id.* at 5. None of these assertions are supported by citations to Google’s written objections and responses to Singular’s Rule 30(b)(6) notice or the parties meet-and-confer

⁸ While Google is not seeking sanctions here, Singular’s repeated violations of the Federal and Local rules could certainly be sanctionable. *See* Fed. R. Civ. P. 37(a)(5)(A); *see also Converse Inc. v. Reebok Int’l Ltd.*, 328 F. Supp. 2d 166, 170–71 (D. Mass. 2004) (issuing sanction to party for failing to comply with Local Rule 7.1’s meet and confer requirement).

correspondence. As a result, Singular either misunderstands or misrepresents Google's positions on each of these issues.⁹

As noted above, Google explicitly agreed in its written responses and objections to produce a witness to discuss the damages topics listed in Singular's motion with respect to Google's Cloud TPU business, the one product area that directly sells services related to the Accused Products. *See, e.g.*, Bruns Decl. Ex. C at 9; Ex. D (agreeing to provide testimony on Topics 10, 12-13, 18, 29-30). Google agreed to produce a witness regarding Google's deployment and use of the accused TPUs, as well as "comparisons between the accused TPU v2 and TPU v3 and alternatives for machine-learning training." Bruns Decl., Ex. C at 6. Moreover, during the parties' May 14, 2021 call, Google agreed to provide testimony on the deployment of the accused TPUs in its data centers, including related costs, savings, asset requests, and the like. *See* Bruns Decl. ¶ 6; *see also* Bruns Decl., Ex D (agreeing to provide testimony on Topic 23).

Taken together, this testimony directly addresses nearly all of the disputed topics. Where it did not, Google went even further. For example, Topic 20 seeks testimony related to "[c]apital asset requests and analyses associated with developing Google's data centers *without* the Accused Products." Mot. at 3 (emphasis added).¹⁰ During the parties' May 14, 2021 call, Google explained that it could not produce a witness to testify about a counterfactual world in which the Accused TPUs are not utilized in its data centers, as no such analyses or capital requests have been located. *See* Bruns Decl. ¶ 6. But in an effort to find middle ground, Google nonetheless

⁹ Singular also repeatedly asserts that Google has attempted to "unilaterally" limit the scope of discovery. Mot. at 1, 5. Not so. Google's written objections to Singular's Rule 30(b)(6) notice sought to define the reasonable scope of its corporate testimony. But the parties were unable to finish the related, required meet-and-confer process because Singular refused to engage.

¹⁰ Topic 23, which Google has already agreed to provide testimony in response to, seeks the same testimony regarding "developing Google data centers *with* the Accused Products." *Id.* at 4.

agreed to produce a witness in response to Topic 20 who will testify about Google’s capital expenditure plans, including *before* the deployment of the Accused TPUs. *Id.* Inexplicably, Singular moved to compel on that topic anyway, and because it refused to meet and confer, Google is left in the dark as to why. In any event, the Rule 30(b)(6) testimony that Google has already agreed to provide belies Singular’s claim that Google has “refused” to provide any testimony related to its data centers. Mot. at 4-5.

Additional context not included in Singular’s brief clarifies how much testimony Google has agreed to provide. To that end, Google provides a chart summarizing Google’s responses. *See* Bruns Decl., Ex. D. In brief, Google has agreed to produce a witness to testify as to at least 26 separate topics (and may be able to offer more, if the parties can agree on additional topics in subsequent meet and confer communications). *Id.* And while Singular has objected to Google’s responses to 16 topics here, it is silent as to Google’s remaining 30 responses, suggesting that Singular has no issue with Google’s approach to the vast majority of topics.

In short, Google has already agreed to provide corporate witnesses to testify about the subject matter targeted in Singular’s motion to the extent it bears any connection to the accused TPUs. Singular should meet and confer with Google to crystallize its needs consistent with an appropriate discovery scope, and then depose Google’s Rule 30(b)(6) witnesses. After that process is complete, if Singular has a good faith basis for arguing that additional discovery is needed, the parties can meet and confer again to work on a solution.

C. Singular is not entitled to broad financial discovery into unaccused products and data centers.

The Federal Circuit has made clear that “discovery is designed to assist a party to prove a claim it reasonably believes to be viable *without discovery*, not to find out if it has any basis for a claim.” *See Micro Motion, Inc.*, 894 F.2d at 1327 (emphasis in original). With respect to

damages discovery, a patentee must be able to articulate a cognizable theory of damages before the doors to discovery of a defendant's sensitive financial information swing open. *See, e.g., Allen v. Howmedica Leibinger GmbH*, 190 F.R.D. 518 (W.D. Tenn. 1999) (denying financial discovery where plaintiff failed to demonstrate relevance to damages); *Largon Precision Co., Ltd. v. Samsung Elecs. Co.*, 13-CV-2740 DMS (NLS), 2014 WL 12199980, at *5 (S.D. Cal. Dec. 11, 2014) (denying financial discovery regarding unaccused products). Moreover, “[a]ny evidence unrelated to the claimed invention does not support compensation for infringement, but punishes beyond the reach of the statute.” *ResQNet.com, Inc. v. Lansa, Inc.*, 594 F.3d 860, 869 (Fed. Cir. 2010).

Singular failed to meet its burden here, as it has yet to set forth any cognizable damages theory linking the alleged invention to the unfettered financial discovery it seeks.

First, as to Topics 10, 12-13, 17-18, 29-30, 32 and 37, which seek detailed financial discovery regarding more than a dozen unaccused products and services, Singular's only theory of relevance hinges on the unsupported assertion that the Accused TPUs—**not** the MXU that allegedly practices the patented invention—enable increased machine-learning capacity that indirectly benefits all of the Services. For example, Singular alleges that “the accused TPUv2 and TPUv3 Devices provide AI capabilities that enhance the performance of its Ads platform,” allowing Google to maximize Ads revenue. ECF No. 37 (FAC) ¶ 25. Singular does not even attempt to draw a meaningful connection between the Accused TPUs and any Service except Ads, arguing only that broad financial discovery into services such as Google Photos, Translate, Gmail, and others is warranted because Google “leverages public engagement with these services to enhance its Ads platform” and the Services “generate at least tens of billions of

dollars per year in profit.” *Id.* On that justification alone, Singular contends it is entitled to sweeping financial discovery into more than a dozen unaccused Google products and services.

The law holds otherwise. *Allen* is instructive. There, the Court denied the patentee’s motion to compel damages discovery, noting that “[t]he party seeking discovery must be able to ‘articulate the possible linkage between the discovery sought and admissible evidence,’” including by “at a minimum, set[ting] forth a recognized damage theory.” 190 F.R.D. at 522, 524. In so doing, the Court noted that to demonstrate relevance, the patentee “must enunciate some factual support for the [damages] theory with some degree of particularity. Broad, general conclusory allegations . . . will not suffice.” *Id.* at 524. Here, Singular’s conclusory allegations are precisely the type that the *Allen* court deemed “too tenuous” to permit discovery into financial, sales, and marketing information. *Id.* Nor does Singular make any attempt to tie the discovery it seeks to the MXU, the subpart of the TPU chip that Singular alleges infringes its patents.

Singular’s vague allusion to a handful of *Georgia-Pacific* factors does not change that calculus. Singular argues that

[d]iscovery of these topics (10, 12-13, 17-18, 29-30, 32 and 37) will allow Singular, and its damages expert, to ascertain to what extent Google’s use of Singular’s patented technology has: (a) promoted the sale of any other Google product or service (e.g., Ads, Search, YouTube) [***Georgia-Pacific* factor 6**]; (b) enhanced the utility of and competitive advantage of any Google product or service over any pre-infringement iteration(s), or over similar offerings from Google’s competitors [***Georgia-Pacific* factor 9**]; and (c) conferred upon Google profits attributable to Singular’s patented technology [***Georgia-Pacific* factor 11**].

Mot. at 7 (emphasis in original). But courts regularly deny financial discovery into unaccused products where, like here, the patentee merely points to the *Georgia-Pacific* factors, without more. *See, e.g., Largon Precision Co.*, 2014 WL 12199980, at *5 (denying financial discovery regarding unaccused products and noting that “[m]erely asserting that ‘a party’s finances are

expressly relevant to damages under the *Georgia-Pacific* analysis’ is as vague and insufficient a statement as the Court can imagine”). Here, Singular offers no explanation as to how any of the discovery it seeks actually translates to evidence relevant to the *Georgia-Pacific* factors it cites. For instance, Topic 17 seeks testimony related to “[i]nternal or market studies prepared by (or for) Google concerning the importance or benefits of the Accused Services, including any features or components thereof.” Mot. at 3.¹¹ But Singular makes no effort to explain how studies regarding “the importance or benefits” of unaccused features of unaccused services could possibly be relevant to its reasonable royalty calculation.

Instead, Singular asserts that if any of the Services use TPUs in any aspect of their business, **every** aspect of those Services is fair game for the broadest possible discovery into their financial performance and projections. By this logic, a plaintiff accusing any aspect of a company’s operations of infringement, no matter how trivial, would be entitled to detailed discovery into every financial detail of the entire company. Such an approach is neither reasonable nor sanctioned by the law, yet this overreach pervades all of Singular’s topics that purport to seek testimony into the financial and business aspects of unaccused Google services spanning multiple lines of business. *See, e.g.*, Topics 10, 12-13, 18 (seeking testimony related to detailed financial data, including projections, cost-savings, profit and loss statements, and capital assets requests and analyses for any product or service that “mak[es] use of the Accused Products” and any “product group or business segment(s) responsible for” them). As drafted, these topics would require Google to identify, designate, and prepare witnesses from across its business to testify about a glut of information that has no apparent relation to Singular’s

¹¹ “Accused Services” is a misnomer, as Singular has defined that term to refer to “all Google services delivered in whole or in part by use of any Accused Product, including Translate, Photos, Search, Assistant, Gmail,” etc.—none of which are accused of infringement.

allegations or infringement disclosures.

In an apparent attempt to justify the irrelevant financial discovery it seeks, Singular alludes to the Entire Market Value Rule, *see* Mot. at 8, which is a “narrow exception” to the general rule requiring royalties be derived from the “smallest salable patent-practicing unit.” *LaserDynamics, Inc. v. Quanta Computer, Inc.*, 694 F.3d 51, 67 (Fed. Cir. 2012). The Entire Market Value Rule provides that “if it can be shown that the patented feature drives the demand for an entire multi-component product, a patentee may be awarded damages as a percentage of revenues or profits attributable to the entire product.” *Id.* Here, Singular does not argue that all revenue for the so-called “Accused Services” is a proper measure of damages. Nor could it. *See, e.g., Power Integrations, Inc. v. Fairchild Semiconductor Int’l, Inc.*, 904 F.3d 965, 979 (Fed. Cir. 2018) (noting that the entire market value rule applies to a multi-featured apparatus only where the patented feature constitutes the basis for consumer demand). But Singular does not explain why, if that is the case, revenue data regarding all Google products and services is discoverable in the first place.¹² Nor has Singular ever disclosed a damages theory based on the Entire Market Value Rule; it should not be permitted to now use the rule to justify the overbroad and irrelevant discovery it seeks here. The Entire Market Value Rule “limit[s] the permissible scope of patentees’ damages theories,” *LaserDynamics*, 694 F.3d at 67, and discovery should be similarly circumscribed.

¹² To the extent Singular contends Google’s concerns are properly addressed through an apportionment analysis at some later stage, that contention is misguided. *See, e.g., Intelligent Verification Sys., LLC v. Microsoft Corp.*, 2:12-cv-525, 2015 WL 1518099, at *6 (E.D. Va. March 31, 2015) (testimony regarding entire sales of the accused product improper where patentee admits that the Entire Market Value Rule exception does not apply; “to opine as to the entire sales under the guise of apportioning circumvents the EMVR entirely”); *see also Uniloc USA v. Microsoft Corp.*, 632 F.3d 1292, 1320 (Fed. Cir. 2011) (cautioning against disclosure of an alleged infringer’s total sales or revenue because of the potential to skew a jury’s damages calculation, and noting “[t]he \$19 billion cat was never put back into the bag . . .”).

Accordingly, all of Singular's topics seeking discovery into Google's unaccused products and services are defective, and Singular's motion to compel must be denied as to those topics.

Second, as to Topics 20-25 and 36, which seek detailed financial discovery regarding Google's data centers, Singular has yet to set forth a cognizable damages theory that would make any of the requested information relevant. After nearly a year of discovery, Singular's only link between a theoretical damages calculation and its proposed broad discovery into Google's data centers is rank speculation based on an unattributed statement in which Google purportedly credited an **unaccused** TPU product with data center cost-savings. *See* Mot. at 3 n.1. Singular argues:

Although Google made the statements in question at the time of the release of TPU v1 (which is not accused), ***it is almost certain*** that Google's training of neural networks using TPU v2 and v3 boards, versus alternative architectures (e.g., FGPAs, GPUs), have allowed Google to save billions of dollars in avoided data center construction, maintenance, and operational costs.¹³

Id. (emphasis added). Thus, Singular admits that the nearly unlimited financial discovery regarding Google's data centers it seeks rests on a statement about "TPU v1 (which is not accused)," and Singular's self-serving speculation that "***it is almost certain***" the Accused TPUs have resulted in similar cost-savings for Google.¹⁴ But "information is not relevant to 'subject matter involved' in the pending action if the inquiry is based on the party's mere suspicion or speculation." *Micro Motion, Inc.*, 894 F.2d at 1326; *see also In re Google Litig.*, C 08-03172 RMW (PSG), 2011 WL 286173, at *9 (N.D. Cal. Jan 27, 2011) (denying damages discovery

¹³ Notably, Singular does not cite any such statement about even the unaccused TPU v1 in its opening brief.

¹⁴ Singular fails to articulate any justification whatsoever for discovery into Google data centers located abroad. *See, e.g., Rodhe & Schwarz GmbH & Co. v. Tektronix, Inc.*, CV 18-02402-SJO (FFMx), 2019 WL 4391114, at *2 (C.D. Ca. May 31, 2019) (finding patentee's contentions "too speculative to justify burdening Defendant with worldwide [damages] discovery").

where patentee could only “speculate what [the documents] ‘likely contain’” and alleged generally that they would address “Google’s overall business models, projected revenues, market share, and profitability”). Moreover, Singular fails to connect, even superficially, any of the data center topics to the allegedly infringing technology here. Its motion to compel discovery into Google’s data centers should be denied.

D. Singular’s topics seek discovery that is unduly burdensome and disproportionate to the needs of the case.

Even if Singular had established its requested information is relevant (which it has not), relevance is only the threshold inquiry, and insufficient to justify the overbroad and burdensome financial discovery Singular demands. Even requests seeking relevant information may not be permitted here compliance would be unduly burdensome, or where harm to the person from whom discovery is sought outweighs the need of the person seeking the information. Fed. R. Civ. P. 26(b)(1); *see also Convolve, Inc. v. Compaq Computer Corp.*, 223 F.R.D. 162, 168 (S.D.N.Y. 2004), *order clarified*, No. 00 Civ. 5141 GBDJCF, 2005 WL 1514284 (S.D.N.Y. June 24, 2005) (denying motion to compel where discovery related to non-accused products was “‘relevant’ under the broad definition of that term that applies in the context of discovery,” but failed the “proportionality test” of Rule 26).

Singular’s motion alleges that “Google admittedly makes extensive use of the Accused Products (TPU v2 and TPU v3 boards)” in at least 16 different Google products and services that span all aspects of Google’s business, from its search tools (Search, Image Search, Google News), to its advertising services (Google Ads), to its communication and publishing tools (Gmail, Docs, Translate, Speech), to its map-related products (Maps), entertainment platforms (YouTube, the Play Store), and more. Mot. at 7. For each such product or service, Singular seeks to compel testimony regarding the financial performance and projections of not only the product,

but also the “product group or business segment(s)” responsible or formerly responsible for it. *See* Mot. at 3 (Topics 10, 12, 13, 18). The Google products in question are distinct entities with their own product management teams. As a result, a different witness might be necessary to testify to the finances of each product. Singular offers no defense of how the expansive and burdensome discovery it seeks is tailored or proportional to the needs of the case. *See Novanta*, 2016 WL 4987110, at *4 (denying patentee broad discovery into accused infringer’s corporate records because it “is not narrowly tailored or proportional to [plaintiff’s] infringement claims.”).

But Singular does not stop there. It also seeks testimony regarding the unaccused features and components of each of the aforementioned unaccused products and services. *Id.* (Topic 17). Not only do these features and components have nothing to do with the accused TPUs—much less the MXUs within them that allegedly infringe Singular’s patents—but these technical subjects would likely require yet a different witness for each product. In other words, even setting aside its similarly overbroad topics targeting Google’s data centers, Singular’s efforts to delve into over a dozen unaccused Google products and services translates into a requirement that Google identify, prepare, and produce numerous corporate witnesses who have no connection to the accused TPUs or this case. Even assuming that Google could collect the information necessary to prepare such deponents for deposition within the waning days of fact discovery and not suffer any prejudice, the disproportionate nature of Singular’s demands is clear in the context of the 16-deposition limit the parties agreed to in their joint Local Rule 16.1(d) statement.¹⁵ ECF No. 54. Not only is expanding discovery at this late stage unwarranted, but the tax on the Court’s and Google’s resources would be extraordinary. The depositions Singular demands could extend discovery by months and invite new disputes between the parties that

¹⁵ Singular has currently noticed more depositions than it is allotted in this case.

must be resolved by the Court—all in service of a fishing expedition into unaccused products and services that are, at best, only obliquely related to Singular’s infringement claims and theoretical damages. The resulting burden to the Court and to Google dwarfs any value that such discovery might provide to Singular here. Accordingly, it should not be permitted.

II. CONCLUSION

For the foregoing reasons, Singular’s motion to compel should be denied.

Respectfully submitted,

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I certify that this document is being filed through the Court's electronic filing system, which serves counsel for other parties who are registered participants as identified on the Notice of Electronic Filing (NEF). Any counsel for other parties who are not registered participants are being served by first class mail on the date of electronic filing.

/s/ Nathan R. Speed

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